[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9056; Directorate Identifier 2016-NM-007-AD]

RIN 2120-AA64

Airworthiness Directives; Saab AB, Saab Aeronautics (Formerly known as Saab AB, Saab Aerosystems) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Saab AB, Saab Aeronautics Model SAAB 2000 airplanes. This proposed AD was prompted by an occurrence that was reported of rudder pedal restriction on a SAAB Model 2000 airplane with the large potable water system (LPWS) installed, equipped with in-line heaters. This proposed AD would require installation of shrinkable tubes on the water piping of the basic potable water system (BPWS). We are proposing this AD to prevent water spray in case of a failed pipe or coupling during water filling on the ground. This condition, if not corrected, could freeze parts of the flight control system possibly resulting in reduced control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov. Follow the instructions for submitting comments.
 - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West
 Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC
 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email saab2000.techsupport@saabgroup.com; Internet http://www.saabgroup.com. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9056; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations

office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2016-9056; Directorate Identifier 2016-NM-007-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to http://www.regulations.gov, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2016-0013, dated January 14, 2016 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for certain Saab AB, Saab Aeronautics Model SAAB 2000 airplanes. The MCAI states:

An occurrence was reported of rudder pedal restriction on a SAAB 2000 aeroplane with the Large Potable Water System (LPWS) installed, equipped with in-line heaters (options 38:201 and 38:201-1). Subsequent investigation showed that this event was the result of a ruptured in-line heater attachment, causing water leakage at the inlet tubing for the in-line heater in the lower part of the forward fuselage (Zone 116). In flight, the water froze on the rudder control mechanism, causing the rudder pedal restriction. Analysis after the reported event indicates that the pitch control mechanism (including pitch disconnect/spring unit) may also be frozen, which would prevent disconnection and normal pitch control.

This condition, if not corrected, could result in further occurrences of water spray, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, EASA issued Emergency AD 2013-0172-E, to require deactivation of the LPWS. Following that, EASA AD 2013-0172R1 introduced a temporary alternative procedure for filling, reactivation and operation of the LPWS.

Finally, EASA AD 2014-0255 was issued, superseding EASA AD 2013-0172R1, to require a modification allowing reactivating of the system and the use of regular filling procedures.

Although the Basic Potable Water System (BPWS) does not contain an in-line heater, which was the major risk contributor and the actual cause of the previous leakage events in the LPWS, a Zonal Safety Analysis performed by SAAB concluded that the implementation of spray shield (tube/hose) for the water piping is necessary for the BPWS as well, to protect the flight controls and electrical equipment from water spray in case of a failed pipe or coupling during water filling on ground.

Consequently SAAB developed a modification and issued Service Bulletin (SB) 2000-38-012 to provide modification instructions to install shrinkable tubes as spray shields.

For reasons described above, this [EASA] AD requires installation of shrinkable tubes on the water piping of the BPWS.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9056.

Related Service Information under 1 CFR part 51

Saab has issued Service Bulletin 2000-38-012, dated August 20, 2015. The service information describes how to install shrinkable tubes on the water piping of the BPWS. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Costs of Compliance

We estimate that this proposed AD affects 7 airplanes of U.S. registry.

We also estimate that it would take about 6 work-hours per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$3,650 per product. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$29,120 or \$4,160 per product.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems):

Docket No. FAA-2016-9056; Directorate Identifier 2016-NM-007-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to certain Saab AB, Saab Aeronautics (formerly known as Saab AB, Saab Aerosystems) Model SAAB 2000 airplanes, certificated in any category, serial

numbers 017, 019 through 021 inclusive, 027 through 028 inclusive, 030, 034, 040, 050, and 052.

(d) Subject

Air Transport Association (ATA) of America Code 38, Water/waste.

(e) Reason

This AD was prompted by an occurrence that was reported of rudder pedal restriction on a SAAB Model 2000 airplane with the large potable water system (LPWS) installed, equipped with in-line heaters. We are issuing this AD to prevent water spray in case of a failed pipe or coupling during water filling on the ground. This condition, if not corrected, could freeze parts of the flight control system, possibly resulting in reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Repair of Basic Potable Water System (BPWS)

Within 24 months after the effective date of this AD, install shrinkable tubes on the water piping of the BPWS, in accordance with the Accomplishment Instructions of SAAB Service Bulletin 2000-38-012, dated August 20, 2015.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards

District Office, as appropriate. If sending information directly to the International Branch/ACO, send it to ATTN: Sharam Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Saab AB, Saab Aerosystems' EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2016-0013, dated January 14, 2016, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9056.

(2) For service information identified in this AD, contact Saab AB, Saab

Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18

4874; email saab2000.techsupport@saabgroup.com; Internet http://www.saabgroup.com.

You may view this service information at the FAA, Transport Airplane Directorate, 1601

Lind Avenue SW., Renton, WA. For information on the availability of this material at the

FAA, call 425-227-1221.

Issued in Renton, Washington, on August 24, 2016.

John P. Piccola, Jr.,

Acting Manager,

Transport Airplane Directorate,

Aircraft Certification Service.

[FR Doc. 2016-21165 Filed: 9/7/2016 8:45 am; Publication Date: 9/8/2016]

10